



# SEQUENCE LISTING

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<120> HEAT-RESISTANT DNA LIGASE

<130> Q79424

<140> 10/780,731

<141> 2004-02-19

<150> JP 2003-045224

<151> 2003-02-24

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<170> PatentIn version 3.3

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<213> Aeropyrum pernix

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Asp Met Pro Phe Lys Pro Val Ala Glu Ala Phe Ala Ser Met Glu Arg	
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ata acc tct agg acg cag ctc acc ctc ctc ctc aca agg ctc ttc aag	144
Ile Thr Ser Arg Thr Gln Leu Thr Leu Leu Leu Thr Arg Leu Phe Lys	
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tcc acg ccc ccg ggg gcg atc ggt att gtg gtg tac ctg atc cag ggg	192
Ser Thr Pro Pro Gly Ala Ile Gly Ile Val Val Tyr Leu Ile Gln Gly	
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Lys Leu Gly Pro Asp Trp Lys Gly Leu Pro Glu Leu Gly Val Gly Glu	
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Lys Leu Leu Val Lys Ala Ile Ala Leu Ala Tyr Lys Ala Thr Glu Glu	
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Arg Val Glu Arg Leu Tyr Lys Ser Val Gly Asp Leu Gly Ser Val Ala	
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gag agg ctg tcg cgg gag tac cgc tcc cgg gct gcc agg gcc gtc acc	384
Glu Arg Leu Ser Arg Glu Tyr Arg Ser Arg Ala Ala Arg Ala Val Thr	
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Leu Glu Ala Phe Met Ala Gly Gly Gly Glu Ala Leu Thr Val Arg Arg	
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Val Tyr Asn Thr Leu Tyr Arg Ile Ala Met Ala Gln Gly Glu Gly Ser	
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Pro Val Glu Ala Lys Tyr Ile Val Arg Phe Val Glu Gly Arg Leu Arg	
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Val Gly Val Gly Asp Ala Thr Val Leu Asp Ala Leu Ala Met Ala Phe	
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Gly Gly Gly Ala His Ala Arg Pro Val Ile Glu Arg Ala Tyr Asn Leu	
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Arg Ala Asp Leu Gly Tyr Ile Ala Glu Val Val Ala Arg Glu Gly Val	
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Asp Ala Leu Arg Gly Val Lys Pro Gln Val Gly Val Pro Ile Arg Pro	
245 250 255	
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Met Leu Ala Glu Arg Gly Arg Asp Pro Ala Glu Ile Leu Arg Lys Val	
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Gly Gly Arg Ala Val Val Glu Tyr Lys Tyr Asp Gly Glu Arg Ala Gln	
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Asn Ile Thr Arg Met Phe Pro Asp Val Val Glu Met Ala Arg Lys Gly	
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Pro	Asp	Asn	Tyr	Glu	Ile	Gln	Pro	Phe	Gln	Val	Leu	Met	Gln	Arg	Lys	
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Phe	Leu	Phe	Asp	Ala	Leu	Tyr	Val	Asp	Gly	Glu	Asp	Leu	Thr	Ser	Lys	
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Pro	Leu	Pro	Glu	Arg	Arg	Arg	Arg	Leu	Lys	Glu	Ile	Val	Val	Glu	Thr	
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Asp	Thr	Val	Asp	Leu	Val	Val	Val	Gly	Ala	Phe	Tyr	Gly	Arg	Gly	Lys	
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Glu	Glu	Leu	Asp	Arg	Met	Asn	Glu	Met	Leu	Lys	Lys	His	Ile	Ile	Pro	
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Arg	Lys	His	Pro	Arg	Val	Glu	Ser	Arg	Ile	Glu	Pro	Asp	Val	Trp	Val	
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Ser	Ile	Arg	Phe	Pro	Arg	Phe	Ile	Arg	Trp	Arg	Asp	Asp	Lys	Ser	Pro	
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Ile	Thr	Ser	Arg	Thr	Gln	Leu	Thr	Leu	Leu	Leu	Thr	Arg	Leu	Phe	Lys
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Ser	Thr	Pro	Pro	Gly	Ala	Ile	Gly	Ile	Val	Val	Tyr	Leu	Ile	Gln	Gly
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Pro Val Glu Ala Lys Tyr Ile Val Arg Phe Val Glu Gly Arg Leu Arg  
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Pro Asp Asn Tyr Glu Ile Gln Pro Phe Gln Val Leu Met Gln Arg Lys  
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Arg Lys His Asp Ile His Arg Val Met Arg Glu Val Pro Val Ala Val  
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Phe Leu Phe Asp Ala Leu Tyr Val Asp Gly Glu Asp Leu Thr Ser Lys  
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Pro Leu Pro Glu Arg Arg Arg Arg Leu Lys Glu Ile Val Val Glu Thr  
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Pro Leu Trp Arg Leu Ala Glu Ser Ile Glu Thr Ser Asp Pro Glu Glu  
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Leu Trp Thr Phe Phe Leu Lys Ala Ile Glu Glu Gly Ala Glu Gly Val  
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Met Val Lys Ala Val His Arg Asp Ser Val Tyr Thr Ala Gly Val Arg  
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Gly Trp Leu Trp Val Lys Leu Lys Arg Asp Tyr Lys Ser Glu Met Met  
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Pro Met His Thr Cys Cys Leu Asn Thr Val Arg Pro Gly Val Gly Ile  
565 570 575

Ser Ile Arg Phe Pro Arg Phe Ile Arg Trp Arg Asp Asp Lys Ser Pro  
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